Oregon, Salmon, Aerial Applications, Buffers

DRAFT 9/19/2014

1. In 2001, Washington Toxics Coalition and two other groups sued EPA under the Endangered Species Act[1] for failure to protect Pacific salmon during EPA's registration of pesticides.[2] In the lawsuit, the plaintiffs did not initially identify just 54 pesticides[3] to sue EPA on – their lawsuit covered all pesticides (953), and Judge Coughenour reduced the number to 54 for which the plaintiffs had submitted some evidence regarding potential for harm to salmon. The court found that the plaintiffs lacked standing for the other 890+ pesticides.[4]

2. Of the 54 pesticides, National Marine Fisheries Service (NMFS) did not and will not issue biological opinions for the pesticides listed below because NMFS and EPA determined that these pesticides have no effect or are not likely to adversely affect the endangered and threatened Pacific salmon and steelhead:

Herbicides	Insecticides and Fungicides
- Alachlor	- Acephate
- Atrazine	- Coumaphos
- Bentazon	- Iprodione
- Dicamba	- Metribuzin
- Dichlobenil	- Oxyfluorfen
- Norflurazon	- Tebuthiuron
- Paraquat dichloride	- Thiodicarb
- Pebulate	
- Simazine	
- Terbacil	
- Triclopyr TEA	

[1] Section 7 of the Endangered Species Act requires each federal agency, in consultation with U.S. Fish and Wildlife Service or National Marine Fisheries Service, to insure that any action carried out is not likely to jeopardize any endangered or threatened species or to adversely modify the habitat of such species.

[2] See page 5 of Washington Toxics Coalition's 2001 Annual Report at http://watoxics.org/files/annual-report-2001

[3] For this document, instead of using the phrase "active ingredient of a pesticide", the term "pesticide" is used.

[4] See pp 12 – 14 of July 2002 order at http://www.epa.gov/oppfead1/endanger/litstatus/wtc/7-02order.pdf. The number was originally 55 because Lindane was counted twice (Lindane gamma-BHC and Lindane HCH).

3. EPA determined that 37 pesticides may affect endangered and threatened Pacific salmon and steelhead and consulted with NMFS on these pesticides[5]. The next section contains 13 herbicides[6] for which NMFS either will issue or has already issued biological opinions.

a. These herbicides still have buffers due to the 2004 court order[7] because NMFS has not yet issued biological opinions for them:
- Bromoxynil
- Metolachlor
- Prometryn

b. The use was cancelled by EPA:
- Molinate

c. The use of this herbicide is allowed only in California on rice:
- Thiobencarb

d. EPA does not authorize these herbicides for forestry use:
- Oryzalin
- Pendimethalin
- Trifluralin

e. NMFS determined in August 2010 that the use of this herbicide is neither jeopardizing nor adversely modifying the critical habitat of any endangered or threatened Pacific salmon and steelhead in Oregon. In addition, EPA does not allow this herbicide to be aerially applied:
- Bensulide

f. NMFS determined in June 2011 that the use of these herbicides is neither jeopardizing nor adversely modifying the critical habitat of any endangered or threatened Pacific salmon and steelhead in Oregon:
- Linuron
- Triclopyr BEE

g. NMFS determined in June 2011 that the use is not jeopardizing any endangered or threatened Pacific salmon or steelhead in Oregon. The use is not adversely modifying critical habitat of any endangered salmon or steelhead in Oregon, except for chinook salmon and steelhead in Lower Columbia River and in Upper Willamette River:
- Diuron

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[5] The full list of biological opinions that include insecticides, fungicides, and herbicides is on the NMFS web page at http://www.nmfs.noaa.gov/pr/consultation/pesticide_schedule.htm

[6] Of the 37 pesticides on which EPA consulted with NMFS, 13 were herbicides.

[7] See January 22, 2004, court order at http://www.epa.gov/espp/litstatus/wtc/1-04order.pdf

h. NMFS determined in June 2011 that the use is jeopardizing all listed Pacific salmon and steelhead in Oregon. The use is not adversely modifying critical habitat of any endangered and threatened Pacific salmon and steelhead in Oregon, except for chinook salmon and steelhead in Upper Willamette River:
- 2,4-D

4. The next section contains 24 insecticides and fungicides[8] for which NMFS issued or will issue biological opinions related to endangered and threatened Pacific salmonids.

a. These insecticides still have buffers due to the 2004 court order because NMFS has yet to issue biological opinions:
- Diflubenzuron
- Fenbutatin oxide
- Propargite
- 1,3-D

b. These insecticides have buffers due to the 2014 settlement agreement:
- Carbaryl
- Chlorpyrifos
- Diazinon
- Malathion
- Methomyl

c. The use of these insecticides was cancelled by EPA:
- Carbofuran
- Lindane

d. NMFS determined in August 2010 and June 2011 that the use of these chemicals neither jeopardizes nor adversely modifies the critical habitat of any endangered or threatened Pacific salmon and steelhead in Oregon:
- Azinphos methyl
- Captan
- Dimethoate
- Disulfoton
- Ethoprop
- Fenamiphos
- Methamidophos
- Methyl parathion

[8] Of the 37 pesticides on which EPA consulted with NMFS, 24 were either insecticides or fungicides.

e. NMFS determined in June 2011 that the use of this chemical is not jeopardizing any endangered or threatened Pacific salmonids in Oregon. The use is not adversely affecting critical habitat of any endangered or threatened Pacific salmonids in Oregon, except for chinook salmon and steelhead in Upper Willamette River:
- chlorothalonil

f. NMFS determined in August 2010 that the use of this chemical is not jeopardizing any threatened or endangered salmonids in Oregon, except for steelhead in Middle Columbia River. The use is not adversely modifying any critical habitat of threatened endangered salmonids in Oregon:
- Methidathion

g. NMFS determined in August 2010 that the use is neither jeopardizing nor adversely modifying the critical habitat of coho salmon in Oregon Coast and Southern Oregon Coast. However, the use is jeopardizing chinook salmon and steelhead in Upper Willamette River; chinook salmon, coho salmon, and steelhead in Lower Columbia River; and steelhead in Middle Columbia River. The use is adversely modifying the critical habitat of chinook salmon and steelhead in Upper Willamette River; chinook salmon and steelhead in Lower Columbia River; and steelhead in Middle Columbia River.
- Phorate

h. NMFS determined in August 2010 that the use is not jeopardizing coho salmon in Oregon Coast but is jeopardizing coho salmon in Southern Oregon Coast; chinook salmon and steelhead in Upper Willamette River; chinook salmon, coho salmon, and steelhead in Lower Columbia River; chum salmon in Columbia River; and steelhead in Middle Columbia River. The use is not adversely modifying the critical habitat of coho salmon in Oregon Coast but is adversely modifying critical habitat of coho salmon in Southern Oregon Coast; chinook salmon and steelhead in Upper Willamette River; chinook salmon and steelhead in Lower Columbia River; chum salmon in Columbia River; and steelhead in Middle Columbia River:
- Naled

i. NMFS determined in August 2010 that the use is not jeopardizing coho salmon in Oregon Coast but is jeopardizing coho salmon in Southern Oregon Coast; chinook salmon and steelhead in Upper Willamette River; chinook salmon, coho salmon, and steelhead in Lower Columbia River; and steelhead in Middle Columbia River. The use is not adversely modifying the critical habitat of coho salmon in Oregon Coast but is adversely modifying critical habitat of coho salmon in Southern Oregon Coast; chinook salmon and steelhead in Upper Willamette River; chinook salmon and steelhead in Lower Columbia River; chum salmon in Columbia River; and steelhead in Middle Columbia River:
- Phosmet